

PACKERS AND STOCKYARDS STATISTICAL REPORT 2000 REPORTING YEAR

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INTRODUCTION

Reporting Firms

This report contains data on (1) slaughtering packers; (2) market agencies buying or selling livestock on commission, including auction markets and all other selling agencies; and (3) livestock dealers buying and selling livestock for their own accounts. It includes data for firms' 2000 reporting year. Part III of the report includes data on entities registered with the Grain Inspection, Packers and Stockyards Administration.

All slaughtering packers operating in commerce in the United States have been subject to the Packers and Stockyards Act since its passage in 1921. Section 201.97 of Chapter 9 of the Code of Federal Regulations requires every packer, live poultry dealer, stockyard owner, market agency, and dealer, unless exempt, to file a report annually with the U.S. Department of Agriculture's (USDA) Grain Inspection, Packers and Stockyards Administration (GIPSA). Prior to reporting year 1977, packers slaughtering less than 1,000 head of cattle or less than 2,000 head of all classes of livestock annually were exempted from the reporting requirements. Beginning with reporting year 1977, packers that

purchase \$500,000 or less of livestock annually have been exempt from the reporting requirements. Since both slaughter volume and the value of purchases vary from year to year, certain small slaughtering packers are required to file an annual report in some years but not in others. Packers beginning operation late in their fiscal year are not required to file annual reports for a partial year. Also, packers going out of business generally are not required to file annual reports, except those firms involved in mergers and acquisitions. In such cases, the acquiring firm is required to file.

A number of firms that slaughter livestock for others are not required to file annual reports with GIPSA and their data are not included in this report. In 2000, 248 firms operating 327 plants reported to GIPSA. In comparison, on January 1, 2000, there were 908 federally inspected plants and 2,357 non-federally inspected plants. Many of these plants operate solely or primarily as custom slaughterers and are not required to file reports with GIPSA because the firms do not purchase more than \$500,000 of livestock annually.

The following table compares the number of plants operated by firms reporting to GIPSA in 2000 with all federally inspected (F.I.) plants by type of livestock. The number of head for plants reporting to GIPSA are head procured for slaughter and do not include any livestock the plant custom slaughters for others. The number of head for F.I. plants include all livestock slaughtered regardless of who owned the livestock.

**Number of plants operated by firms reporting to GIPSA
and number of federally inspected (F.I.) plants, 2000**

Type of livestock	GIPSA coverage		F. I. plants	
	Less than 1,000 head	All plants	Less than 1,000 head	All plants
Cattle	39	189	546	738
Calves	29	69	225	314
Hogs	25	187	459	721
Sheep/lambs	28	62	471	541

Packers reporting to GIPSA accounted for the following percentages of 2000 commercial slaughter:

<u>Type</u>	<u>Percent</u>
Steers and heifers	98
Cows and bulls	96
Cattle	97
Calves	85
Hogs	96
Sheep and lambs	87

Calendar Year/Reporting Year

In most cases, the calendar year and a packer's reporting year are the same. A majority of meat packers use the calendar year as their fiscal, or operating, year for accounting purposes. Many packers, however, use fiscal years that end in months other than December. GIPSA incorporates the data supplied by these packers into the year in which the packer's fiscal year ends. Thus, data from a packer whose fiscal year ends May 31, 2000, is included in the 2000 reporting year.

Type of Outlet

Prior to 1988, GIPSA reported statistics separately for terminal markets, in which sales are made by private treaty, and for auctions, in which sales are made through open public bidding. Beginning in 1988, GIPSA combined livestock volumes sold through terminals and auctions, and reported those sales as "public markets" sales due to few terminal markets and the small numbers of livestock at terminal markets.

Consolidated Reports of Firms

Packing firms may elect to file consolidated reports for all of their slaughter operations unless they are bonded separately. Since 1980, annual reports filed by separated bonded units of a firm have been combined by GIPSA. Reports are combined when reporting entities are under one firm's ownership.

HIGHLIGHTS OF THIS REPORT

What's New

Two new tables (tables 24 and 25) describe the extent to which packers specialize in the type of livestock they process. Table 24 lists the number of firms by number of types of livestock slaughtered, and table 25 lists the same information in percentage terms. Information in both tables is broken out by firm size.

Concentration of Meatpacking Firms

This report contains two series of concentration ratios¹ for steers and heifers, cows and bulls, cattle, hogs, and sheep and lambs. The first is based on procurement data reported to GIPSA by packers, and includes all livestock procured for slaughter by each firm, including livestock custom-slaughtered for reporting packers by other firms and livestock slaughtered in State-inspected plants. The data are reported by firms for their fiscal years. The second concentration series is based on slaughter data collected by USDA's Food Safety and Inspection Service (FSIS) from federally inspected plants. These data are for the calendar year. FSIS reports the number of animals slaughtered at each plant regardless of who owns the animals. We have adjusted these data to reflect ownership of the animals based on information provided by reporting packers. Both series use total commercial slaughter for the calendar year as the denominator for calculating concentration ratios. The discussion that follows is based on concentration ratios calculated using the FSIS data when applicable.

After reaching an all-time high of 70.4 percent in 1999, four-firm concentration in cattle slaughter slid to 69.4 percent in 2000 and 67.9 percent in 2001 (see table 26). A broader measure of

concentration, the Herfindahl–Hirschman Index² (HHI), declined from 1,477 in 1999 to 1,420 in 2000.³

The four-firm concentration ratio for steer and heifer slaughter has been relatively stable since 1993. The ratio fell from 81.4 percent in 2000 and to 80.3 percent in 2001. The HHI decreased slightly from 1,942 in 1999 to 1,939 in 2000 (see table 27). Steer and heifer procurement has the highest 4-firm concentration ratio in the red meatpacking industry.

Four-firm concentration of cow and bull slaughterers increased from 20 percent in 1990 to 32 percent in 2000, and an all-time high of 35.2 percent in 2001 (see table 28). The HHI rose from 437 in 1999 to 456 in 2000.

Four-firm concentration in hog slaughter rose nearly 10 percentage points to 55.3 percent in 1996, but has been relatively stable between 54 percent and 57 percent since 1996 (see table 30). The ratio was 56.7 percent in 2001. The HHI rose slightly from 1,020 in 1999 to 1,033 in 2000.

Four-firm concentration in sheep and lamb slaughter rose from 51 percent in 1985 to 70 percent in 1990. The ratio has averaged

¹A concentration ratio is defined as the percentage of total activity (e.g. slaughter, livestock purchases) accounted for by the largest firms, usually the four largest firms.

² The HHI is defined as the sum of each firm's squared percentage of market share. The Department of Justice and the Federal Trade Commission consider markets to be unconcentrated when the value of the HHI is below 1,000, moderately concentrated when HHI is between 1,000 and 1,800, and highly concentrated when HHI is above 1,800. (U.S. Department of Justice and the Federal Trade Commission, Horizontal Merger Guidelines, issued April 2, 1992, revised April 8, 1997).

³ HHIs are not available for all species for 2001.

between 65 and 68 percent since 1997 (see table 31). Based on the information reported to GIPSA, HHI was 1,416 in 2000.

Overall concentration in the red meatpacking industry has increased markedly over the last two decades. In 1980, the four largest firms (in terms of total dollar amount spent for all livestock slaughtered) accounted for less than 26 percent of all livestock procured for slaughter (see table 33). Concentration increased slowly until 1986, and then jumped from 37 percent to 47 percent in 1987. Concentration continued to increase, reaching 62.9 percent in 1993. Four-firm concentration was relatively stable at about 62 to 63 percent between 1993 and 1998, and then increased to 65.8 percent in 1999 and 66 percent in 2000. HHI was 1,314 in 2000.

Number and Size of Plants

The number of packing plants operated by firms reporting to GIPSA continued to fall in 2000 (see table 16). The number of plants reporting slaughter to GIPSA declined by about 7 percent in cattle, 18 percent in calves, and 7 percent in sheep and lambs. In contrast, the number of hog slaughtering plants reporting to GIPSA rose by 9 percent in 2000.

While the overall number of packing plants operated by reporting packers has fallen over the years, the number of slaughter plants in the largest size categories remained relatively steady (see tables 17 through 23). In contrast, the number of slaughter plants in the smallest size category (slaughtering less than 1,000 head) for each type of animal except hogs fell dramatically in 2000.

Specialization of Packers

The total number of reporting meatpackers dropped from 810 in 1980 to 247 in 2000. Table 24 shows that most of the decline occurred in firms that slaughter two or more types of livestock. Since the mid-1990s, the majority of packers purchasing more than \$5 million of slaughter livestock have specialized in only one type of livestock. Table 25 shows the trend in percentages. The proportion of packers slaughtering only one type of livestock has risen steadily from about 17 percent in 1980 to 47 percent in 2000.

Use of Public and Nonpublic Marketing Channels

Packer purchases at public markets include purchases at auction and terminal markets at public stockyards, and video auctions. Purchases through nonpublic marketing channels include direct purchases by packers at their plants, packer-owned buying stations, feedyards, and from dealers.

In 2000, the proportion of all types of livestock, except for calves, bought by packers in public markets continued to fall, reaching all-time lows (see table 2). After a sharp drop from more than 50 percent in the 1980s to less than 20 percent in the early 1990s, the use of public markets by calf packers rose in the mid-1990s. Packers purchased 28 percent of their slaughter calves in public markets in 2000. Hog packers' use of public markets continued to decline in 2000, with 3 percent of hogs purchased through public markets. The proportion of sheep and lambs bought in public markets was fairly constant from the early 1980s through the mid-1990s, ranging between 16 and 21 percent. The proportion fell to less than 12 percent in 1999, and remained there in 2000.

The proportion of slaughter cattle purchased in public markets dropped from 13 percent in 1999 to less than 13 percent in 2000. More than 75 percent of cattle purchased at public markets were cows and bulls. Packers purchased about 60 percent of their slaughter cows and bulls through public marketing channels in 2000, but only about 4 percent of the steers and heifers they slaughtered.

Use of public marketing channels for cattle varies geographically (see table 7). Packers used public markets much more frequently to purchase steers and heifers in the South Atlantic region than in other regions (see table 5). Packers used public markets to purchase the majority of their slaughter cows and bulls in every region except the Southern Plains region (see table 6).

Hog slaughterers showed much less regional variation in use of public markets (see table 9). In 2000, in all regions except the North Atlantic, packers purchased less than 6 percent of their hogs in public markets, while packers in the North Atlantic region procured about 13 percent of their hogs through public markets.

Smaller packers continued to rely on public markets for their slaughter needs more than larger packers (see table 3). The four largest packers procured the smallest proportion of their slaughter needs in public markets compared with other packers, and the proportion grows as packer size decreases. In 2000, the 20 largest packers procured 8 percent of their cattle and less than 2 percent of their hogs through public markets. In contrast, packers smaller than the top 20 procured 47 percent of their slaughter cattle and 13 percent of their hogs through public markets.

Carcass-Basis Procurement

The proportion of slaughter livestock purchased on a carcass basis (such as grade, weight, yield, guaranteed yield, or percent lean) in 2000 ranged from 38 percent for cows and bulls to 74 percent for hogs (see table 11). The percentage of cattle purchased on a carcass basis rose to an all-time high of 52 percent in 2000 (see table 12). About half of all slaughter calves bought in 1999 and 2000 were procured on a carcass basis. This was substantially higher than the proportion in the mid 1990s, but below the levels seen earlier in the decade. The proportion of hogs purchased on a carcass basis fell slightly from 75 percent in 1999 to 74 percent in 2000, and remains the highest among all types of slaughtered livestock. The percentage of sheep and lambs purchased on a carcass basis rose noticeably to 56 percent in 2000, up from 52 percent in 1999.

The 20 largest packers, based on total amount spent for all livestock slaughtered, purchased a larger percentage of livestock on a carcass basis than did other packers (see table 12). In 2000, the 20 largest packers purchased 79 percent of their hogs and 54 percent of their cattle on a carcass basis, compared to other packers who purchased 34 percent of their hogs and 37 percent of their cattle on a carcass basis.

Packer Feeding, Forward Contracting, and Marketing Agreements

GIPSA defines captive supplies as livestock that are owned or fed by a packer more than 14 days prior to slaughter, livestock that are procured by a packer through a forward contract or marketing agreement that has been in place for more than 14 days, or livestock that are otherwise committed to a packer more than 14 days prior to slaughter. This definition includes animals procured

through forward contracts, marketing agreements, and packer feeding arrangements.

In January 2002, GIPSA completed a major study of captive supplies in the beef industry. As part of that study, GIPSA audited the procurement data reported by the four leading steer and heifer slaughters for 1999. As a result of the audit, GIPSA revised packer feeding numbers from 3.6 percent to 8.4 percent of those firms' total steer and heifer slaughter. The percentage of those firms' steer and heifer slaughter obtained through forward contracts and marketing agreements was revised from 21.4 percent to 24 percent. GIPSA has also audited the top four firms' captive supply filings for 2000. Table 13 contains statistics calculated from unaudited data reported by the packers for 1988–98 and audited data for the top four firms for 1999 and 2000.

The top four firms' use of forward contracts and marketing agreements rose from 24 percent in 1999 to about 29 percent of their total steer and heifer procurement in 2000 (see table 13). Packer feeding of steers and heifers by the top four firms increased by less than 1 percentage point to about 9 percent of their total slaughter in 2000. Overall, in 2000, the use of all forms of captive supply by the top four steer and heifer packers rose nearly 6 percentage points above 1999 levels, to 38 percent, its highest level.

Packer Financial Performance

Tables 34 through 38 present financial ratios for several groupings of the 40 largest meatpacking firms. Firms are ranked by total expenditures for livestock. All firms in these tables slaughter livestock. Some of the firms also further process carcasses, and some have large non-red meat operations. Often these firms file

financial statements only for their red meat operations. However, a few firms file consolidated financial statements in which their meatpacking and processing operations are not separated from their other operations. Thus, these data and the financial statistics calculated from packers' reports may include the financial performance of non-meat operations of some firms. The calculated averages of the financial statistics do not measure meat-industry performance precisely, and may be influenced by non-meat operations.

Profitability (measured by net income as a percentage of sales) of the 40 largest meat packers has varied widely since 1992 (see table 38). In 1992 and 1993, profitability of the top 40 firms was 1.2 percent of sales; in 1995, profitability rose to 3.7 percent of sales. Profitability of the top 40 firms dropped sharply from 2.75 percent in 1999 to 1.8 percent in 2000, its lowest level since the early 1990s. The 20 largest packers reported larger profits as a percentage of sales than packers ranked 21 through 40 throughout the 1992–2000 period. From 1993 to 2000, firms ranked 5 through 20 showed larger profits than the top four packers.

The top four firms generally have operated on smaller gross margins (also known as gross income) than smaller firms (see tables 34 and 36). Between 1993 and 2000, the top four firms reported gross margins as percentages of sales that were 6 to 18 percentage points below firms ranked 5 through 20. The top four packers' operating expense ratios were also lower (see tables 34, 35, and 37). The top four firms had higher net sales per dollar of assets than any other group (see table 35).

Auction and Terminal Market Purchases

In 2000, the number of cattle and calves marketed through firms selling on commission fell after increasing in 1999 (see table 41); total volume dropped from 41 million head in 1999 to 40 million head in 2000. The volume of hogs marketed through firms selling on commission continued a downward trend seen throughout the 1990s, falling to less than 8 million head in 2000, down by 0.5 million head from 1999. The volume of sheep and lambs marketed through firms selling on commission fluctuated during 1990s. The highest volume of the decade, 5.7 million head, was reported in 1996. In 2000, the volume of sheep and lambs marketed through firms selling on commission fell to 3.9 million head, the lowest volume recorded in the past decade.

Livestock Purchases by Dealers and Order Buyers

Purchases of cattle and calves by dealers and order buyers⁴ continued to increase for the second consecutive year, to more than 36 million head in 2000, after dropping in 1998 (see table 41). Purchases of hogs and pigs by dealers and order buyers fell in 2000; the volume of 19 million head was 55 percent below the highest level of the decade, reached in 1993. The number of sheep and lambs purchased by dealers and order buyers fell slightly from 3.4 million head in 1999 to 3.3 million head in 2000.

⁴ Order buyers purchase on a commission basis for others.

MERGERS AND ACQUISITIONS IN MEAT PACKING

Numerous mergers and acquisitions have occurred in meat packing during the past several years. The following table lists mergers and acquisitions in 2000 and 2001 involving at least one firm that is required to file an annual report with GIPSA. Most transactions involved the purchase of entire firms; some, which are noted, included only plants.

Meat Packer Mergers and Acquisitions, 2000–2001

2000

Acquiring Company: IBP, inc.; Dakota Dunes, SD.

Company Acquired: Oscar Meyer's Madison, WI, closed packing plants in Sherman, TX, and Goodlettsville, TN.

Acquiring Company: Premium Standard Farms; Kansas City, MO.

Company Acquired: Lundy Packing Company; Clinton, NC.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.

Company Acquired: Coddle Roasted Meats; Portsmouth, VA.

Acquiring Company: Rosen's Diversified; Fairmont, MN.

Company Acquired: Gibbon Packing plant, from the city of Gibbon, NE.

Acquiring Company: Supreme Beef Processors; Dallas, TX.

Company Acquired: Palestine, TX, cow processing plant from IBP, inc.; Dakota Dunes, SD.

2001

Acquiring Company: Excel Co.; Wichita, KS.
Company Acquired: Emmpak Foods; Milwaukee, WI.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.
Company Acquired: Gorges/Quik-to-Fix Foods, Inc.; Dallas, TX.

Acquiring Company: Tyson Foods; Springdale, AR.
Company Acquired: IBP, inc.; Dakota Dunes, SD.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.
Company Acquired: Moyer Packing Co.; Souderton, PA.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.
Company Acquired: Packerland Packing Co.; Green Bay, WI.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.
Company Acquired: RMH Foods, Inc.; Morton, IL.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.
Company Acquired: Stadler's Country Hams, Inc.; Elon College, N.C.

Acquiring Company: Pork America, Inc.; North Liberty, IA.
Company Acquired: Pork plant in Estherville, IA, from Ace Union Foods; Taiwan.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.
Company Acquired: Smithfield Companies; Portsmouth, VA.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.
Company Acquired: Pinnacle Foods (50 percent stake); Pottstown, PA.

